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PTO/SB/05 (4/98)  
Approved for use through 09/30/2000. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No. 520.38682X00

First Inventor or Application Identifier Shinichi NAKAYAMA, ET AL.

Title STORAGE SUBSYSTEM AND STORAGE CONTROLLER

Express Mail Label No.

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ \* Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Specification [Total Pages 30]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the invention
  - Brief Summary of the invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
3. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 5]
4. Oath or Declaration [Total Pages]
  - a. ☐ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))  
(for continuation/divisional with Box 16 completed)
    - i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting  
inventor(s) named in the prior application,  
see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

**NOTE FOR ITEMS 1 & 13 IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY  
FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT  
IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).**

ADDRESS TO: Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

5. ☐ Microfiche Computer Program (Appendix)
6. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a. ☐ Computer Readable Copy
  - b. ☐ Paper Copy (identical to computer copy)
  - c. ☐ Statement verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

7. ☐ Assignment Papers (cover sheet & document(s))
8. ☐ 37 C.F.R. § 3.73(b) Statement ☐ Power of  
(when there is an assignee) ☐ Attorney
9. ☐ English Translation Document (if applicable)
10. ☐ Information Disclosure ☐ Copies of IDS  
Statement (IDS)/PTO-1449 ☐ Citations
11. ☐ Preliminary Amendment
12. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
13. ☐ \* Small Entity ☐ Statement filed in prior application  
Statement(s) ☐ Status still proper and desired  
(PTO/SB/09-12)
14. ☒ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
15. ☒ Other: List and Copy of Prior Art Reference

16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_

Group / Art Unit: \_\_\_\_\_

**For CONTINUATION or DIVISIONAL APPS only:** The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 17. CORRESPONDENCE ADDRESS

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or ☐ Correspondence address below

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Address					
City	State	Zip Code			
Country	Telephone	Fax			

Name (Print/Type)	Alan E. Schiavelli	Registration No. (Attorney/Agent)	32,087
Signature		Date	06/30/2000

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<b>FEE TRANSMITTAL</b> <b>for FY 2000</b> <small>Patent fees are subject to annual revision. Small Entity payments <u>must</u> be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12. See 37 C.F.R. §§ 1.27 and 1.28.</small>		<b>Complete if Known</b>		
		Application Number		
		Filing Date	June 30, 2000	
		First Named Inventor	Shinichi NAKAYAMA, ET AL.	
		Examiner Name		
		Group / Art Unit		
TOTAL AMOUNT OF PAYMENT (\$)		924.00	Attorney Docket No.	520.38682X00

<b>METHOD OF PAYMENT (check one)</b>		<b>FEE CALCULATION (continued)</b>																																																																																																																																																																													
1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:  Deposit Account Number: 01-2135  Deposit Account Name: Antonelli, Terry, Stout & Kraus  <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17		<b>3. ADDITIONAL FEES</b>																																																																																																																																																																													
2. <input checked="" type="checkbox"/> Payment Enclosed: <input checked="" type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other		<table border="1"><thead><tr><th>Large Entity Fee Code</th><th>Small Entity Fee Code</th><th>Fee Description</th><th>Fee Paid</th></tr></thead><tbody><tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td>0.00</td></tr><tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet.</td><td>0.00</td></tr><tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td>0.00</td></tr><tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td>0.00</td></tr><tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td>0.00</td></tr><tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td>0.00</td></tr><tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td>0.00</td></tr><tr><td>116</td><td>380</td><td>216</td><td>190</td><td>Extension for reply within second month</td><td>0.00</td></tr><tr><td>117</td><td>870</td><td>217</td><td>435</td><td>Extension for reply within third month</td><td>0.00</td></tr><tr><td>118</td><td>1,360</td><td>218</td><td>680</td><td>Extension for reply within fourth month</td><td>0.00</td></tr><tr><td>128</td><td>1,850</td><td>228</td><td>925</td><td>Extension for reply within fifth month</td><td>0.00</td></tr><tr><td>119</td><td>300</td><td>219</td><td>150</td><td>Notice of Appeal</td><td>0.00</td></tr><tr><td>120</td><td>300</td><td>220</td><td>150</td><td>Filing a brief in support of an appeal</td><td>0.00</td></tr><tr><td>121</td><td>260</td><td>221</td><td>130</td><td>Request for oral hearing</td><td>0.00</td></tr><tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td>0.00</td></tr><tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td>0.00</td></tr><tr><td>141</td><td>1,210</td><td>241</td><td>605</td><td>Petition to revive - unintentional</td><td>0.00</td></tr><tr><td>142</td><td>1,210</td><td>242</td><td>605</td><td>Utility issue fee (or reissue)</td><td>0.00</td></tr><tr><td>143</td><td>430</td><td>243</td><td>215</td><td>Design issue fee</td><td>0.00</td></tr><tr><td>144</td><td>580</td><td>244</td><td>290</td><td>Plant issue fee</td><td>0.00</td></tr><tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td>0.00</td></tr><tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional applications</td><td>0.00</td></tr><tr><td>126</td><td>240</td><td>126</td><td>240</td><td>Submission of Information Disclosure Stmt</td><td>0.00</td></tr><tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td>0.00</td></tr><tr><td>146</td><td>690</td><td>246</td><td>345</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td>0.00</td></tr><tr><td>149</td><td>690</td><td>249</td><td>345</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td>0.00</td></tr><tr><td colspan="2"></td><td colspan="2">Other fee (specify) _____ 0.00</td></tr><tr><td colspan="2"></td><td colspan="2">Other fee (specify) _____ 0.00</td></tr><tr><td colspan="2">SUBTOTAL (3)</td><td colspan="2">(\$) 0.00</td></tr></tbody></table>		Large Entity Fee Code	Small Entity Fee Code	Fee Description	Fee Paid	105	130	205	65	Surcharge - late filing fee or oath	0.00	127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	0.00	139	130	139	130	Non-English specification	0.00	147	2,520	147	2,520	For filing a request for reexamination	0.00	112	920*	112	920*	Requesting publication of SIR prior to Examiner action	0.00	113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	0.00	115	110	215	55	Extension for reply within first month	0.00	116	380	216	190	Extension for reply within second month	0.00	117	870	217	435	Extension for reply within third month	0.00	118	1,360	218	680	Extension for reply within fourth month	0.00	128	1,850	228	925	Extension for reply within fifth month	0.00	119	300	219	150	Notice of Appeal	0.00	120	300	220	150	Filing a brief in support of an appeal	0.00	121	260	221	130	Request for oral hearing	0.00	138	1,510	138	1,510	Petition to institute a public use proceeding	0.00	140	110	240	55	Petition to revive - unavoidable	0.00	141	1,210	241	605	Petition to revive - unintentional	0.00	142	1,210	242	605	Utility issue fee (or reissue)	0.00	143	430	243	215	Design issue fee	0.00	144	580	244	290	Plant issue fee	0.00	122	130	122	130	Petitions to the Commissioner	0.00	123	50	123	50	Petitions related to provisional applications	0.00	126	240	126	240	Submission of Information Disclosure Stmt	0.00	581	40	581	40	Recording each patent assignment per property (times number of properties)	0.00	146	690	246	345	Filing a submission after final rejection (37 CFR § 1.129(a))	0.00	149	690	249	345	For each additional invention to be examined (37 CFR § 1.129(b))	0.00			Other fee (specify) _____ 0.00				Other fee (specify) _____ 0.00		SUBTOTAL (3)		(\$) 0.00	
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<b>SUBMITTED BY</b>		<b>Complete (if applicable)</b>	
Name (Print/Type)	Alan E. Schiavelli	Registration No. (Attorney/Agent)	32,087
Signature		Telephone	703-312-6600
		Date	06/30/2000

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